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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,314	01/16/2002	Jean-Yves Vion-Dury	111171	2810
25944	7590	08/09/2007	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			WALSH, JOHN B	
ART UNIT		PAPER NUMBER		
2151				
MAIL DATE		DELIVERY MODE		
08/09/2007		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/046,314	VION-DURY ET AL.
<b>Examiner</b>	<b>Art Unit</b>	
	John B. Walsh	2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on RCE of 7/20/07.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1 and 3-15 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1 and 3-15 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a))

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_

5)  Notice of Informal Patent Application

6)  Other: \_\_\_\_\_

***DETAILED ACTION***

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. As best understood, claims 1 and 3-15 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,487,566 to Sundaresan.

As concerns claim 1, identifying and testing the structural form of the expression (column 4, lines 32-38; column 5, lines 40-60; figure 3); choosing a transformation model for the filter that is compatible with the structural form of the expression (column 4, lines 35-38; column 6, lines 32-33; figure 3); evaluating a first code structure representing the expression to determine a value of said expression prior to filtering (figure 3; 308; column 6, lines 30-40; 308 is prior to steps 310,312); analyzing a second code structure representing the filter to determine the characteristics of the filter (figure 3; 310,312; column 6, lines 30-40); and filtering said evaluated value according to the filter characteristics (figure 3; 314,316,318; column 6, lines 38-42); wherein said first code structure is constructed from a plurality of first programming language code structure elements and said second code structure is constructed from a plurality of second programming language code structure elements (column 6, line 38-41; XML; column 12, lines 42-45); each second structure element being symmetrically constructed to correspond to one of said first structure elements (figure 3, 312-match-yes); and wherein evaluating, analyzing

and filtering are performed upon explicit invocation of a matching operator (figure 3, 312; column 6, line 38), and filtering comprises returning a Boolean evaluation result value (figure 3, 312; column 6, line 40).

As concerns claim 3, the second code structure includes at least one composition operator acting as a logical connector (column 9, line 28 and 41; column 7, lines 54-55) for logically combining two of said programming language code structure elements, or for inverting the Boolean value of at least one of said second programming language code structure elements.

As concerns claim 4, the first code structure includes a first concatenation operator (column 11, lines 42-44, 58-62) for concatenating two expressions, and the second code structure includes a second concatenation operator (column 11, lines 42-44, 58-62) for concatenating two filter elements, the first and the second concatenation operators being applied with the first code structure and the second code structure, respectively, in essentially the same manner.

As concerns claim 5, wherein the first and second code structures include indicator elements indicating a data type (column 9, lines 22-23, attributes), the indicator elements acting as structure constructors in the first code structure and as filter constructors in the second code structure, each of the structure constructors corresponding to a respective one of the filter constructors.

As concerns claim 6, wherein the second code structure includes a test operator having an operand and wherein filtering comprises testing the occurrence of the value of said operand in the expression (figure 3, 312).

As concerns claim 7, wherein the second code structure includes an existence operator that matching any element that exists (figure 3; 312).

As concerns claim 8, wherein the second code structure includes an assignment operator having an assignment operator having an operand, to assign a part of the expression to a variable (column 7, line 11) that is identified by said operand.

As concerns claim 9, the second code structure includes a Kleene operator (column 7, lines 54-55- “\*” and “+”, interpreted based on applicant’s specification page 13, line 9).

As concerns claim 10, the second code structure includes a do operator having two arguments, one argument being a filter and the other argument being an instruction or a sequence of instructions, wherein filtering includes executing the instructions only if the filter is successful (column 11, lines 17-32; column 12, lines 42-45-other languages use the “do” operator).

As concerns claim 11, the filter is a recursive filter enabling filtering of trees (figure 3; 310, 320).

As concerns claim 12, the filter is a normalized filter (column 6, line 40; normalized to true or false).

As concerns claim 13, filtering includes modifying the environment of the computer system (figure 3, 322, 316,318), the environment including variables and corresponding values used by the computer system when filtering said value of said expression.

As concerns claim 14, the first code structure and the second code structure are part of an interpreter programming language code (column 12, lines 42-45).

As concerns claim 15, the first code structure and the second code structure are part of a compiler programming language (column 12, lines 42-45).

***Response to Arguments***

3. Applicant's arguments filed July 20, 2007 have been fully considered but they are not persuasive.

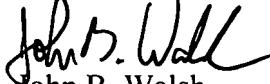
The applicant argues Sundaresan does not disclose the limitations of claim 1, "identifying and testing the structural form of the expression; choosing a transformation model for the filter that is compatible with the structural form of the expression," since Sundaresan teaches only evaluating and filtering a single structural form of data, which is programming language text data. The examiner disagrees since these limitations have been addressed in the rejection above. Furthermore the claim limitations do not recite pattern matching using multiple languages or negate the use of only evaluating and filtering a single structural form of data, which is programming language text data.

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Thursday from 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be contacted. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
John B. Walsh  
Primary Examiner  
Art Unit 2151